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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

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Application Number 10/527,300

Filing Date 3/9/2005

First Named Inventor STEPHEN ALFRED MIRANDA

Art Unit 2614

Examiner Name

Attorney Docket Number IPL-1US

ENCLOSURES (Check all that apply)

- | | | |
|---|---|---|
| <input type="checkbox"/> Fee Transmittal Form | <input type="checkbox"/> Drawing(s) | <input type="checkbox"/> After Allowance Communication to TC |
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| <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53 | | |

Remarks

Enclosed is a Supplemental Information Disclosure Statement

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name George S. Gray - Attorney

Signature

Printed name George S. Gray

Date

April 25, 2007

Reg. No.

37,140

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

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GEORGE S. GRAY

Date

April 25, 2007

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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APPLICATION NO. : 10/527300
Applicant : STEPHEN ALFRED MIRANDA
Application Filed : 3/9/2005
TC/A.U. : 2614
Examiner : NA

Attorney Docket No. : IPL-1US
Attorney Cust. No. : 30901

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner of Patents
P. O. Box 1450
Alexandria, VA 22313-1450

APRIL 25, 2007

Dear Sir or Madam:

Attached hereto is a reasonable facsimile of Form PTO-1449 listing additional patents and/or other documents believed relevant, to some extent, to the subject application. It is respectfully requested that these documents be considered by the examiner and an initialed copy of each form be returned to the undersigned.

This disclosure statement should not be construed as a representation that a search has been made or that no other material information exists as defined in 37 C.F.R. Section 1.56.

It is believed that this disclosure complies with the requirements of 37 C.F.R. Sections 1.56, 1.97, and 1.98, and the Manual of Patent Examining Procedures Section 609. If for some reason the examiner considers otherwise, it is respectfully requested that the undersigned be called so that any deficiencies can be remedied.

A copy of each document is enclosed, except for United States patents and/or United States published patent applications.

Some of the documents may have markings thereon. No significance is meant to be attached to the markings.

These documents are not necessarily analogous art. The relevance of each document will now be discussed.

DOCUMENTS

Document 5 is United States Patent No. 5,125,032, wherein is disclosed for a talk/listen headset, essentially comprising two ear protection capsules (1, 2) connected to one another via a headband (3), two microphones (6, 7) are located in one of these along a vertical (9) which runs, projected on the head of the wearer, through the middle of the temporal bone and extends up to the mandibular angle. While the upper microphone (6) acts in the area of the end of the zygomatic arch, the lower microphone (7) is located in the area of the articular process of the ascending ramus of the jaw. Both microphones (6, 7) react to solid-borne sound and are piezoelectric resonators with a mass-forming body, an impedance converter and a filter/equalizer, the microphones being connected to one another in terms of voltage in order to absorb or compensate the local tone amplitudes to the bottom and to the top caused by the reproduction. This has the effect that this indirect reproduction of the voice is optimised in terms of tone and timbre. The ear protection capsules (1, 2) also contain earphones (4a, 4b) and one receiving element (12a, 12b) each. The latter are directed towards the background noises. Microphones (6, 7), earphones (4a, 4b) and receiving elements (12a, 12b) interact with an electronic component (13) integrated in the ear protection capsules, the circuit of which component has, inter alia a communication priority in favor of the microphones and earphones and not in favor of the receiving elements.

Document 6 is United States Patent No. 5,054,079, wherein is disclosed a microphone assembly for mounting in a head gear of a person includes a microphone

positioned in intimate contact with the person for receiving vibrations from the vocal cords by bone conduction, a housing for holding the microphone, a mounting ring for mounting the housing to the head gear and a damper element disposed between the microphone and the head gear for damping extraneous sides transmitted through the headgear before they are picked up by the microphone.

Document 7 is United States Patent No. 4,969,534, wherein is disclosed that the casing of a hearing aid can be acoustically dampened and its receiver is less likely to amplify noise stemming from vibrations of the casing when the casing is lined with a viscoelastic material. The viscoelastic lining can be applied by laying a viscoelastic layer across the rim of the casing and drawing a vacuum at the sound-communicating orifice of the casing until the viscoelastic is drawn tightly against the interior of the casing. A preferred viscoelastic layer has at one surface a substance such as fibers or beads that will form temporary bridges to permit an air to be evacuated between the viscoelastic layer and a casing to which it is applied. When the deposited viscoelastic is tacky at room temperature, the components of the hearing aid can be positioned simply by pressing them into the viscoelastic material, thus making the assembly easier than prior methods of assembling tiny hearing aids.

Document 8 is United States Patent No. 5,889,730, wherein is disclosed an underwater audio communication system to be worn by a diver is connected with and carried by a conventional face mask such that bone conduction occurs through the mastoid bone of the diver (i.e., behind the ear of the diver). The underwater audio communication system includes a face mask with a head strap for placement behind the head of the diver. A transceiver which is connected with and carried by the head strap is configured for receiving and transmitting ultrasonic signals in the water. At least one bone conduction transducer assembly is connected with and carried by the head strap at a location for placement against a mastoid bone of the diver. Each bone conduction transducer assembly is electrically connected with the transceiver.

Document 9 is United States Patent No. 4,972,491, wherein is disclosed a combination ear protector and communications headset particularly adapted to the rugged, lightweight, convenience needs of aircraft ground crew members that are required to work in a hazardous noise environment. The headset includes two earplug-

type transducers that function as a combination ultrasensitive microphone and speaker which are automatically inserted into the user's ears when the invention is disposed for use, thereby sealing the interior of the ear from ambient noise. In the ear protection mode of use, the headset is quickly and easily convertible to communications usage.

Document 10 is United States Patent No. 6,209,144, wherein is disclosed a protective garment (10) adapted to be worn by personnel in high temperature or otherwise harmful environments. The garment comprises a torso section 11 and depending on the wearer's needs and desires, arms (14), head (13) and leg sections (15) and readily attachable complementary portions for covering the face, hands and feet extremities. The garment is equipped with a supply of precooled and dehumidified ventilating gas or other coolant medium to be flowed over various body parts of the wearer. The coolant supply comprises one or more storage containers (20) carried about the waist. The coolant is supplied therefrom through a valve (25) to an inlet (41) in the suit. From the inlet, the coolant medium is distributed through flexible conduits (50) which include component distribution systems (55A, 55B, 57A, 57B, 61A, 61B) leading to the various body parts. The conduits are preferably attached to the lining of the suit and each provided along its length with holes (59) which are of increasing diameters in the direction away from the suit inlet to provide more uniform flow to a body area. Each component distribution system includes a thermostatic valve (81) or valve (61) controlled by a thermocouple (60) fixed at a location in the distribution zone such as at the ankles, wrists, or waist of the wearer whereby the valve acts to control coolant flow to a particular body area in order to maintain the surface temperature of the particular body area in a narrow range about 72.degree. to 76.degree.. The garment also includes sensors for monitoring and signalling physiological signs and providing other information as to the location, physical condition and identity of the garment wearer and an electrical communications system for transmitting such information to a remote base station and for receiving information therefrom.

Document 11 is United States Patent No. 6,198,394, wherein is disclosed a system for remotely monitoring personnel status includes a plurality of sensors disposable on a soldier or other person for developing signals which may be used to determine the physiological status. The sensors communicate with a soldier unit which can process

the information to ensure that the sensor data falls within acceptable ranges and communicate with remote monitors. The soldier unit also includes a global positioning system. By using the sensor data and the global positioning system, leaders and medics can quickly and accurately track and treat casualties in battle. The system enables more rapid location of the casualty, as well as remote triage/initial diagnosis, thereby assuring that those who are most in need of treatment are attended to first. Typically, the system monitors both body surface and ambient temperature, heart rate, shivering, motion status and body condition. Additional sensors can be provided to supply information on other physiological parameter which may be desired for more thorough diagnosis. The physiological information may be stored and kept with the soldier to enable improved care as the soldier is moved to higher levels of care.

Document 12 is United States Patent No. 5,990,793, wherein is disclosed an integrated safety and communication system for attachment to a standard type of firefighter's face mask includes a command post tracking and accountability monitor, and a mask attachment having means for transmitting the amplified voice of the wearer to anybody within its audible range, and to enable communications with the command post including identification, location, vital signs such as pulse and respiratory rate, vicinity temperature, hydrocarbon monitoring and alarm signal if the wearer becomes motionless for a predetermined time period.

Document 13 is United States Patent No. 5,404,577, wherein is disclosed a generally hands-free, voice communication system in combination with a head-protective helmet. The helmet protects the wearer's head and the communications system permits voice communications between journeyman personnel, e.g. firefighters, police, military, industrial, hazardous material handling personnel, in relatively close proximity with each other and between journeymen and a group leader; and the group leader's communication system to also permit relatively long-range communication between the group leader and a relatively distant communications center such as a fire engine or distant fire company, base station or repeater.

Document 14 is United States Patent No. 5,323,468, wherein an arrangement is disclosed for the delivery of stereophonic soundwaves through the mastoid bone structure of the human skull. The system allows for the partial bypassing of the use of the auditory

canals, and for the conduction of audio output signals generated in a stereo radio, tape player or other audio device, leaving the auditory canals unobstructed and able to receive airborne sound waves. The system includes one or more acoustical transducers applied to the sides of a person's head adjacent each of his ear canals and in acoustical conduction with the mastoid bone structure thereat. Incoming audio signals to be received through the bone structure are processed in a manner in which these signals are compared to the sonic conductivity data for the bone structure so that selective amplification of the sonic frequency spectrum which are more poorly or slowly conducted through the mastoid bone structure may be enhanced thereby increasing the efficiency of the reception of the incoming audio signals by the person.

Document 15 is Japan Patent Application Publication No. 11-21581, wherein a bone-conducting headset is provided for the purpose of attaining satisfactory transmission/reception without being affected by external noises, the headset providing a bone-conduction loudspeaker placed around an ear, a bone-conducting microphone placed at an optional position on the head, and a support means that supports them.

Document 16 is Japan Patent Application Publication No. 01-146497, wherein a bone-conduction calling device is provided for the purpose of decreasing an incongruous sense at the time of installation by installing the microphone and/or receiver of a bone conduction structure at the hollow of the nape of the head part.

Document 17 is Japan Patent Application Publication No. 64-071399, wherein a bone-conduction microphone is provided for the purpose of easily mounting the microphone without a special outfit by constituting it so that a vibration pick-up body may be fitted a suspended condition in a space around a vibration sensing part.

Document 18 is Japan Patent Application Publication No. 08-195994, wherein a bone-conduction earphone/microphone is provided for the purpose of eliminating the need of inserting an earpiece or the like into an external auditory device by arranging the diaphragm of a bone-conduction voice vibration detector on a plane approximately the same as a necessary plane surrounding a cover and constituting a bone-conduction earphone microphone.

Document 19 is Japan Patent Application Publication No. 63-097088, wherein a speaking device can be used under water and its action is hardly restricted by installing a

necessary apparatus in a helmet, etc., and making a microphone (or a receiver for underwater use) a bone conduction structure, and fixing its vibrating part at the inside wall of the helmet.

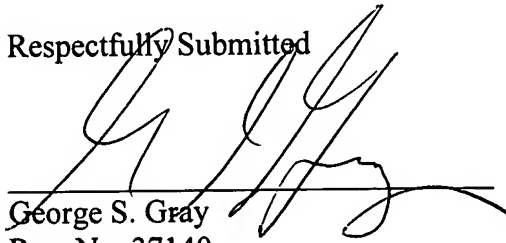
Document 20 is WIPO Patent Application Publication No. WO2003/015465, wherein is disclosed an integrated ear-mounted transmitter and receiver which is used in a communication and having high suppressed feedback, comprises a transmitter unit (10) which is composed of transducer (11), protrusion-like pickup piece (12) and sound processing circuit (13); receiver unit (20) which is composed of speaker (21) and sound-transfer tube (22) connected with it; housing (30) accommodated to ear duct-type and wire (40) connected with transmitter unit and receiver unit, characterized in that transmitter unit (10) and receiver (20) are isolated by high damping material, and at least transmitter and housing are isolated by high damping material; a part of protrusion-like pickup piece protrudes from hole (310 of housing (30), since vibration damping capability of high damping material, and reduces effectively feedback of duplexing work, so it can preferably eliminate howling and echo, reduce noise signal, improve sound quality and carry comfortably.

Document 21 is WIPO Patent Application Publication No. WO2004/013977, wherein is disclosed a waterproof recreational audio device and method that transmits sound via transcutaneous bone conduction provides high fidelity musical signals to a user. The device can be worn on the head of a user and integrated into various types of headgear. The device is tunable for sound quality and comfort by adjusting and moving the sound transmitting transducers around the head of the user. The devices uses commercially available transducers to produce sounds in the low, mid and high frequency ranges. A sound source for the musical signal can also be provided as part of the waterproof recreational audio device. Controls enable the user to select volume levels for the high, mid and low frequency ranges, while a volume limiter restricts the mid range to a present maximum volume level to allow external ambient sounds to be heard via the ear canal and protects the hearing of the user.

Document 22 is United Kingdom Patent Application Publication No. GB 2295291, wherein is disclosed a headgear communication device without earphones, which includes an audio vibrator 2,4 attached to a rigid part of the headgear, which part

then transfers the vibrations to the rest of the headgear. The rigid parts produce audible sound for the ears, while those parts in contact with the skull can transmit vibrations via the bone structure, direct to the inner ears. The vibrator may be mounted without having to modify the structure or components of the headgear so preserving any built-in safety features and complying with existing standards. The device can be used in conjunction with a microphone to allow transmission of two way speech.

Respectfully Submitted



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Reg. No. 37140

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Docket Number (Optional)

IPL-1US

Application Number

10/527300



**INFORMATION DISCLOSURE CITATION
IN AN APPLICATION**
(Use several sheets if necessary)

Applicant:

STEPHEN ALFRED MIRANDA

Filing Date: 3/9/2005

Group Art Unit: 2614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOC. NO.	PATENT or APPLICATION NUMBER	DATE OF ISSUE OR PUBLICATION	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
	5	5,125,032	06-23-1992	Meister, et al.			
	6	5,054,079	10-01-1991	Frielingsdorf, et al			
	7	4,969,534	11-13-1990	Kolpe, et al.			
	8	5,889,730	03-30-1999	May			
	9	4,972,491	11-20-1990	Wilcox, Jr.			
	10	6,209,144	04-03-2001	Carter			
	11	6,198,394	03-06-2001	Jacobsen, et al.			
	12	5,990,793	11-23-1999	Bieback			
	13	5,404,577	04-04-1995	Zuckerman, et al.			
	14	5,323,468	06-21-1994	Bottesch			

FOREIGN PATENT DOCUMENTS

	DOC. NO.	DATE	COUNTRY/APP. NO.	CLASS	SUB- CLASS	Translation	
						YES	NO
	15	08-06-1999	Japan 11-215581				
	16	06-08-1989	Japan 01-146497				
	17	03-16-1989	Japan 64-071399				
	18	07-30-1988	Japan 08-195994				

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

Exam. Initials	DOC. NO.	DATE	

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP §609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449 [Reasonable Facsimile]

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FOREIGN PATENT DOCUMENTS

	DOC. NO.	DATE	COUNTRY/APP. NO.	CLASS	SUB- CLASS	Translation	
						YES	NO
	19	04-27-1988	Japan 63-097088				
	20	02-20-2003	WIPO 2003/015465				
	21	02-12-2004	WIPO 2004/013977				
	22	05-22-1996	United Kingdom: GB 2295291				

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP §609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.